

## SCIENCE TO HELP UNDERSTAND AND MANAGE IMPORTANT GROUND-WATER RESOURCES



Throughout California, as pressure on water resources continues to grow, water-supply agencies are looking to the state's biggest "reservoir" – its ground-water basins – for supply and storage. To better utilize that resource, the Sweetwater Authority and other local partners, including the city of San Diego and Otay Water Districts, are working with the U.S. Geological Survey (USGS) to develop the first comprehensive study of the coastal ground-water resources of southern San Diego County. USGS research is providing the integrated geologic and hydrologic knowledge necessary to help effectively utilize this resource on a coordinated, regional basis.

USGS scientists are building a real-time well-monitoring network and gathering information about how the aquifers respond to different pumping and recharge-management strategies. Real-time ground-water levels are recorded every hour and are viewable on a project web site (<http://ca.water.usgs.gov/sandiego/index.html>). Data from the wells are helping to define the geology and hydrogeology of the area, define ground-water quality, and assess ground-water levels. The wells also are strategically placed and designed to be usable by the local agencies for decades to come to help manage surface-water and ground-water operations.

Additionally, the knowledge gained from the USGS study will help local, state, and federal agencies; water purveyors; and USGS scientists to understand the effects of urbanization on the local surface-water, ground-water, and biological resources, and to better critique ideas and opportunities for additional ground-water development in the San Diego area.

*USGS scientists conduct research drilling to help understand complex ground-water systems.*



*"There is no question that the USGS is providing good science, that it isn't politicized,*

*and that we can use it for management decisions."*

Dennis Bostad,  
General Manager,  
Sweetwater Authority



**For more information about the USGS Cooperative Water Program, contact:**  
**Donna Schiffer, Acting Director,**  
**U.S. Geological Survey,**  
**California Water Science Center**  
**916/278-3000 [schiffer@usgs.gov](mailto:schiffer@usgs.gov)**  
**<http://water.usgs.gov/coop>**

*A monitoring well site provides solar-powered transmission of real-time ground-water data.*

